

Title (en)

Crosslinkable Compositions, thermoplastic elastomers obtained therefrom and their use

Title (de)

Vernetzbare Zusammensetzungen, daraus erhältliche thermoplastische Elastomere und deren Verwendung

Title (fr)

Compositions réticulables, élastomères thermoplastiques à partir de celles-ci et leur utilisation

Publication

EP 1762593 B1 20090429 (DE)

Application

EP 06018188 A 20060831

Priority

DE 102005042265 A 20050906

Abstract (en)

[origin: EP1762593A1] Carboxylate salts of tri- or tetra-valent metals are used as crosslinkers in crosslinkable compositions based on thermoplastic polymers and carboxylated elastomers. Crosslinkable compositions (CC) containing (1) thermoplastic polymer(s), (2) elastomer(s) with carboxyl groups and (3) a crosslinker system comprising one or more salts of formula (R y->) x/y M x+> (I) in which R y->a 1-26C hydrocarbon residue with y carboxyl groups; y : 1, 2, 3 or 4; x : 3 or 4; M : a tri- or tetra-valent metal . Independent claims are included for (1) a method for the production of CC by mixing all three components at a temperature above the highest melting point (m.pt.) or glass transition point (Tg) of the polymer (1) (2) a method for the production of thermoplastic elastomers by subjecting CC to a continuous mixing process under the above temperature conditions (3) thermoplastic elastomers based on (1) and (2), in which component (2) is crosslinked by a system (3) as above (4) moulded parts made from such thermoplastic elastomers .

IPC 8 full level

C08L 13/00 (2006.01); **C08K 5/098** (2006.01)

CPC (source: EP KR US)

C08F 8/44 (2013.01 - EP US); **C08K 3/10** (2013.01 - KR); **C08L 13/00** (2013.01 - EP US); **C08L 15/005** (2013.01 - EP US); **C08L 101/00** (2013.01 - KR); **C08L 101/02** (2013.01 - EP US); **C08K 5/098** (2013.01 - EP US); **C08L 77/00** (2013.01 - EP US)

C-Set (source: EP US)

1. **C08L 13/00** + **C08L 2666/14**
2. **C08L 15/005** + **C08L 2666/14**
3. **C08L 101/02** + **C08L 2666/04**

Cited by

CN105992797A; US8969467B2; WO2007120707A3; WO2012065786A1; WO2014006044A1; WO2015101599A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1762593 A1 20070314; **EP 1762593 B1 20090429**; AT E430180 T1 20090515; BR PI0603764 A 20070427; CN 1974663 A 20070606; CN 1974663 B 20110622; DE 102005042265 A1 20070308; DE 502006003589 D1 20090610; JP 2007070632 A 20070322; JP 5324035 B2 20131023; KR 101298898 B1 20130821; KR 20070027458 A 20070309; MX PA06010030 A 20070305; TW I433883 B 20140411; US 2007055018 A1 20070308; US 8013070 B2 20110906

DOCDB simple family (application)

EP 06018188 A 20060831; AT 06018188 T 20060831; BR PI0603764 A 20060906; CN 200610128184 A 20060906; DE 102005042265 A 20050906; DE 502006003589 T 20060831; JP 2006240624 A 20060905; KR 20060085134 A 20060905; MX PA06010030 A 20060904; TW 95132644 A 20060905; US 51505506 A 20060901